at page 82, line 10, please replace "sulfate," with —sulfate),—;

**IN THE CLAIMS:**

Please amend claims 1, 12, 13, 19, 26, and 38 as follows:

1. (Amended) A compound that has formula (I):

$P^1$-$S^1$-$B^1$-M-X

or a derivative thereof, wherein:

$P^1$ is a triphosphate group;

$S^1$ is a ribose, a deoxyribose or a dideoxyribose;

$B^1$ is a nucleobase;

X is a protected or unprotected hydrazino group, a protected or unprotected oxyamino group, or a carbonyl derivative; and

M is a divalent group comprising any combination of any the following groups, which are combined in any order: arylene, heteroarylene, cycloalkylene, $C(R^1)_2$, $-C(R^1)=C(R^1)-$, $>C=C(R^2)(R^3)$, $>C(R^2)(R^3)$, $-C\equiv C-$, O, $S(A)_a$, $P(D)_b(R^1)$, $P(D)_b(ER^1)$, $N(R^1)$, $>N^+(R^2)(R^3)$ and C(E); where a is 0, 1 or 2; b is 0, 1, 2 or 3; A is O or $NR^1$; D is S or O; and E is S, O or $NR^1$;

each $R^1$ is a monovalent group independently selected from hydrogen and $M^1$-$R^4$;

each $M^1$ is a divalent group each independently comprising any[u] combination of the following groups, which groups are combined in any order: a direct link, arylene, heteroarylene, cycloalkylene, $C(R^5)_2$, $-C(R^5)=C(R^5)-$, $>C=C(R^2)(R^3)$, $>C(R^2)(R^3)$, $-C\equiv C-$, O, $S(A)_a$, $P(D)_b(R^5)$, $P(D)_b(ER^5)$, $N(R^5)$, $N(COR^5)$, $>N^+(R^2)(R^3)$ and C(E); where a is 0, 1 or 2; b is 0, 1, 2 or 3; A is O or $NR^5$; D is S or O; and E is S, O or $NR^5$;

$R^4$ and $R^5$ are each independently selected from the group consisting of hydrogen, halo, pseudohalo, cyano, azido, nitro, $SiR^6R^7R^8$, alkyl, alkenyl, alkynyl, haloalkyl, haloalkoxy, aryl, aralkyl, aralkenyl, aralkynyl, heteroaryl, heteroaralkyl,

heteroaralkenyl, heteroaralkynyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkenyl, heterocyclylalkynyl, hydroxy, alkoxy, aryloxy, aralkoxy, heteroaralkoxy and $NR^9R^{10}$;

$R^9$ and $R^{10}$ are each independently selected from hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl and heterocyclyl;

$R^2$ and $R^3$ are selected from (i) or (ii) as follows:

(i) $R^2$ and $R^3$ are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl and heteroaryl; or

(ii) $R^2$ and $R^3$ together form alkylene, alkenylene or cycloalkylene;

$R^6$, $R^7$ and $R^8$ are each independently a monovalent group selected from hydrogen, alkyl, alkenyl, alkynyl, haloalkyl, haloalkoxy, aryl, aralkyl, aralkenyl, aralkynyl, heteroaryl, heteroaralkyl, heteroaralkenyl, heteroaralkynyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkenyl, heterocyclylalkynyl, hydroxy, alkoxy, aryloxy, aralkoxy, heteroaralkoxy and $NR^9R^{10}$; and

each $R^1$, $R^2$, $R^3$, $R^4$, $R^5$, $R^6$, $R^7$, $R^8$, $R^9$ and $R^{10}$ is unsubstituted or substituted with one or more substituents each independently selected from Z, wherein Z is selected from alkyl, alkenyl, alkynyl, aryl, cycloalkyl, cycloalkenyl, hydroxy, $S(O)_hR^{20}$, $NR^{20}R^{21}$, $COOR^{20}$, $COR^{20}$, $CONR^{20}R^{21}$, $OC(O)NR^{20}R^{21}$, $N(R^{20})C(O)R^{21}$, alkoxy, aryloxy, heteroaryl, heterocyclyl, heteroaryloxy, heterocyclyloxy, aralkyl, aralkenyl, aralkynyl, heteroaralkyl, heteroaralkenyl, heteroaralkynyl, aralkoxy, heteroaralkoxy, alkoxycarbonyl, carbamoyl, thiocarbamoyl, alkoxycarbonyl, carboxyaryl, halo, pseudohalo, haloalkyl and carboxamido; h is 0, 1 or 2; and $R^{20}$ and $R^{21}$ are each independently selected from the group consisting of hydrogen, halo, pseudohalo, cyano, azido, nitro, trialkylsilyl, dialkylarylsilyl, alkyldiarylsilyl, triarylsilyl, alkyl, alkenyl, alkynyl, haloalkyl, haloalkoxy, aryl, aralkyl, aralkenyl, aralkynyl, heteroaryl, heteroaralkyl, heteroaralkenyl, heteroaralkynyl, heterocyclyl, heterocyclylalkyl,

heterocyclylalkenyl, heterocyclylalkynyl, hydroxy, alkoxy, aryloxy, aralkoxy, heteroaralkoxy, amino, amido, alkylamino, dialkylamino, alkylarylamino, diarylamino and arylamino.

12. (Amended) The compound of claim 1, wherein X is $-C(O)R^{30}$, $-Y-N(R^{31})-Y^1-N(R^{32})-Y^2$ or $-O-N(R^{30})-Y^2$;

where $R^{30}$, $R^{31}$ and $R^{32}$ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroaralkyl, heteroaralkenyl, heteroaralkynyl, heterocyclyl or cycloalkyl; Y and $Y^1$ are selected as in (i) or (ii) as follows:

(i) Y is a direct link, and $Y^1$ is a direct link, $C(O)N(R^{35})$, $N(R^{35})C(O)N(R^{36})$, $C(S)N(R^{35})$, $N(R^{35})C(S)N(R^{36})$ or $C(O)N(R^{35})N(R^{36})C(O)N(R^{37})$; or

(ii) Y is C(O) or OC(O), and $Y^1$ is a direct link;

where $R^{35}$, $R^{36}$ and $R^{37}$ are each independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroaralkyl, heteroaralkenyl, heteroaralkynyl, heterocyclyl and cylcoalkyl; and

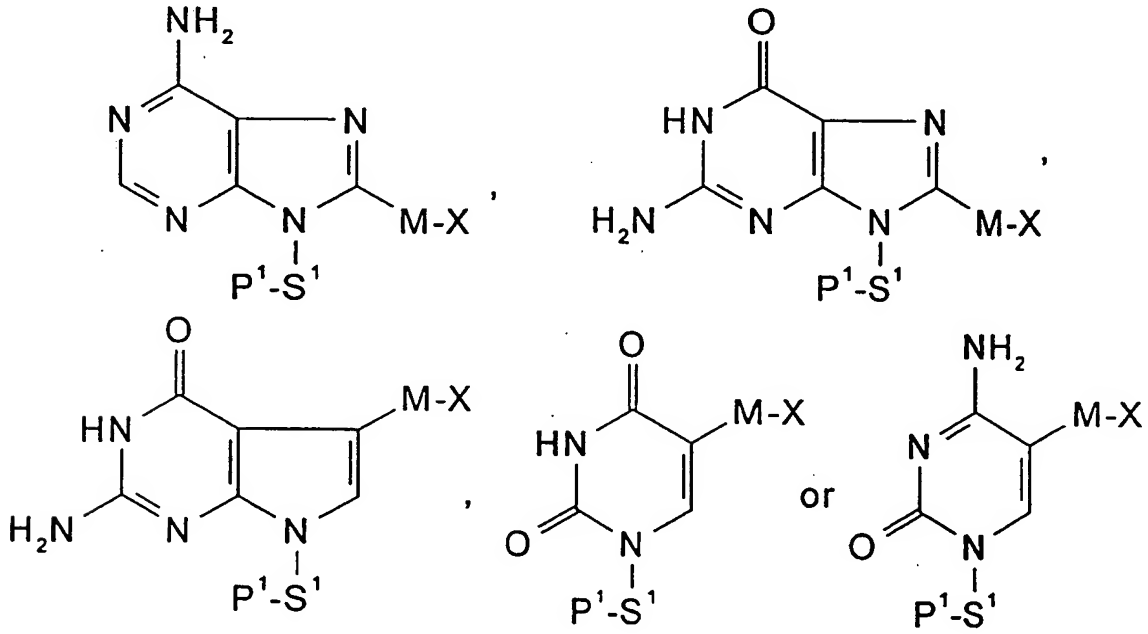
$Y^2$ is a salt of the hydrazino or oxyamino group, or any amino or hydrazino protecting group;

where $R^{30}$, $R^{31}$, $R^{32}$, $R^{35}$, $R^{36}$, $R^{37}$ and $Y^2$ are [unsubsituted] <u>unsubstituted</u> or substituted with one or more substituents each independently selected from Z, wherein Z is selected from alkyl, alkenyl, alkynyl, aryl, cycloalkyl, cycloalkenyl, hydroxy, $S(O)_hR^{20}$, $NR^{20}R^{21}$, $COOR^{20}$, $COR^{20}$, $CONR^{20}R^{21}$, $OC(O)NR^{20}R^{21}$, $N(R^{20})C(O)R^{21}$, alkoxy, aryloxy, heteroaryl, heterocyclyl, heteroaryloxy, heterocyclyloxy, aralkyl, aralkenyl, aralkynyl, heteroaralkyl, heteroaralkenyl, heteroaralkynyl, aralkoxy, heteroaralkoxy, alkoxycarbonyl, carbamoyl, thiocarbamoyl, alkoxycarbonyl, carboxyaryl, halo, pseudohalo, halo-alkyl and carboxamido; h is 0, 1 or 2; and $R^{20}$ and $R^{21}$ are each independently

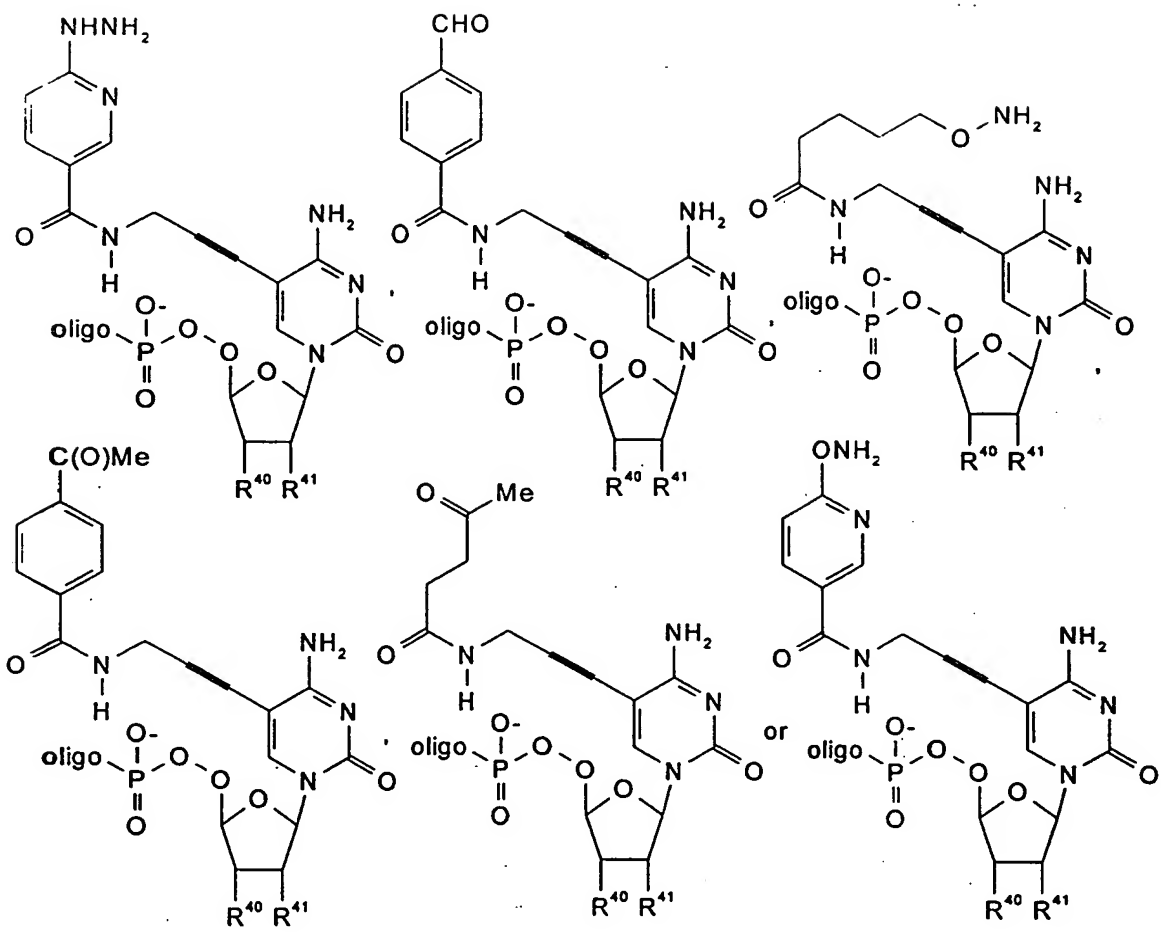
selected from the group consisting of hydrogen, halo, pseudohalo, cyano, azido, nitro, trialkylsilyl, dialkylarylsilyl, alkyldiarylsilyl, triarylsilyl, alkyl, alkenyl, alkynyl, haloalkyl, haloalkoxy, aryl, aralkyl, aralkenyl, aralkynyl, heteroaryl, heteroaralkyl, heteroaralkenyl, heteroaralkynyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkenyl, heterocyclylalkynyl, hydroxy, alkoxy, aryloxy, aralkoxy, heteroaralkoxy, amino, amido, alkylamino, dialkylamino, alkylarylamino, diarylamino and arylamino.

13. (Amended) The compound of claim 12, wherein $Y^2$ is selected from monomethoxytrityl (MMT), dimethoxytrityl (DMT), 9-fluorenylmethoxycarbonyl (FMOC), acetyl, [trifluroracetyl] <u>trifluoroacetyl</u> (TFA), benzoyl, or a lower aliphatic hydrazone or oxime.

19. (Amended) The compound of claim 1 that has any of the [formula:] <u>formulae:</u>




26. The compound of claim 25 that has any of formula: [formula:] <u>formulae:</u>



wherein $R^{40}$ is selected from the group consisting of an oligonucleotide, H and OH; and $R^{41}$ is selected from the group consisting of H and OH.

38. (Amended) The compound of claim 1, wherein M has the [formulae:] formula: